Shared Rate Development Methodology Summary

Outcome Desired: ITIB Finance Committee and ITIB approval of the methodology for developing rates for services for subsequent submission to JLARC.

Background: The fundamental concepts for rate development have been used by VITA and its predecessor agencies for more than 20 years. VITA has demonstrated an aptitude for developing rates that has withstood the scrutiny of numerous State, Federal and independent audits. VITA generally requests approval from JLARC for every new rate prior to implementing that rate.

Current Direction: Several initiatives already underway or on the near horizon include:

- Server consolidation in conjunction with the Capital area renovation project
- Consolidation of other servers and facilities
- Consolidated e-mail services
- Learning Management System application
- Desktop management
- Statewide customer care center
- Shared logical multi-processor NT VMWARE service
- Shared physical multi-processor Unix PrimePower service
- Statewide Alert Network application (SWAN)
- G2G data sharing project
- Data center

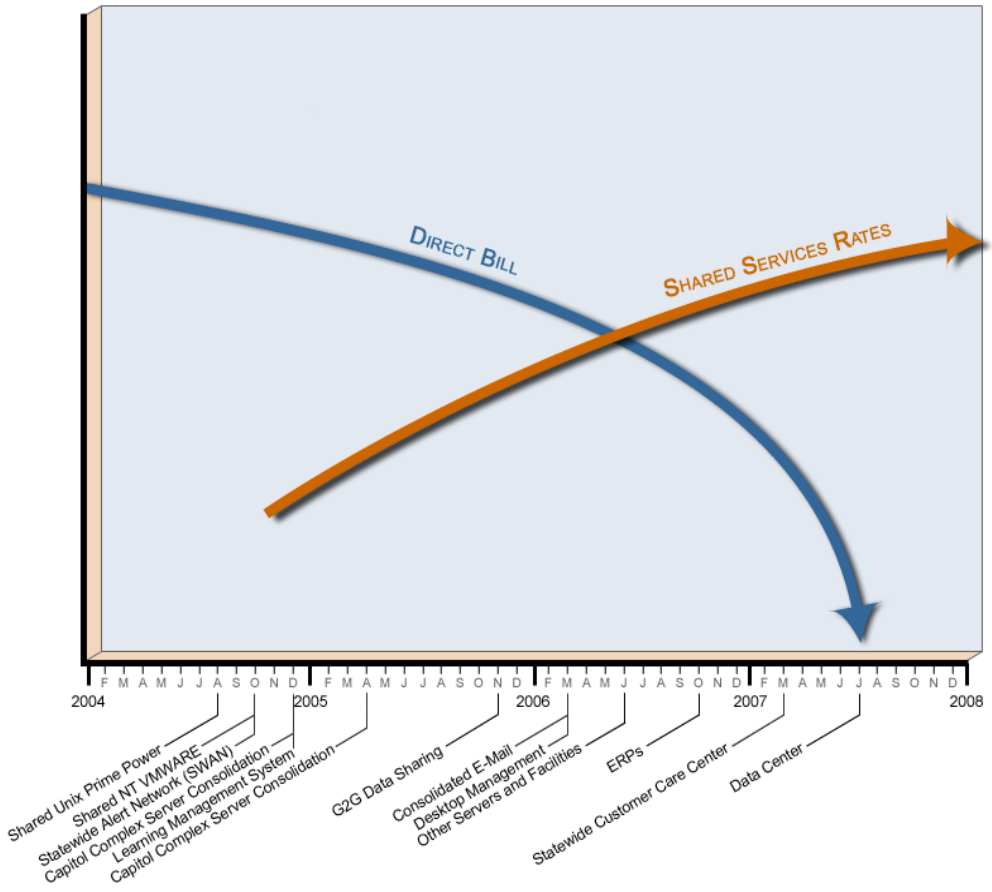
These projects are likely to require the development of one or more rates that, practically speaking, should be usable at the time the service is implemented. VITA proposes to request that JLARC approve the *methodology* for developing our rates upfront so that VITA can then expedite the *implementation* of new rates. Each individual rate will still require JLARC approval.

VITA will also commit to providing JLARC staff with any new or changed rates prior to their implementation. VITA recognizes that JLARC may initiate an audit of any or all of the service rates in use at any time.

As the above initiatives are implemented, VITA will rely less and less on the direct bill methodology, as shown in the graph below. A detailed description of VITA's methodology for developing rates and a hypothetical example follow.

Next Steps: Once approved by the IT Investment Board, VITA will provide our proposal to JLARC staff on April 9, 2004 for consideration by JLARC at its May 2004 meeting.

Projected Timeline of Two Methodologies



Virginia Information Technologies Agency
Methodology for Developing Product and Service Rates

Purpose

This document defines the methodology VITA follows in the determination of charging models and the development of rates, specifically addressing the development of rates for shared services.

Overview

With few exceptions, the Virginia Information Technologies Agency (VITA) operates as a sum sufficient Internal Service Fund using accrual accounting. All expenses incurred to develop, deliver and administer products and services are recovered from the customer community through various charging models. Charges for each product or service are designed to recover the actual expenses incurred in providing the product or service. The remainder of this document defines VITA's methodology for developing rates for new services.

Business Case Process

Rate development begins with the preparation of a business case. VITA's business case policy requires that proposed new services or major changes to existing services must be initiated by preparing a business case. VITA's business case procedure specifies the required content of the business case document and cost analysis worksheet. At a high level, the information provided in the business case allows VITA to make informed business decisions by determining answers to questions such as:

- How much demand exists for the service?
- Should VITA be involved in providing the service?
- What is the best method for service delivery considering cost and benefit?
  - Service hosted or provided by VITA
  - Service outsourced to a third party
  - Service provided by developing a partnership with a third party
  - Service remains status quo

For purposes of rate setting, the most pertinent information provided in the business case is a description of the current environment and alternatives for providing the proposed service. The business case proponent is required to include the actual costs incurred to support the current environment and cost projections related to each alternative presented. Cost information is provided in worksheet format and includes costs for hardware, software, facilities, personnel and other expenses. Once the descriptive and cost information provided by the proponent is determined to be comprehensive, VITA Financial Management Services finalizes the total cost of providing the proposed service under each alternative presented. The total cost and benefits are weighed against the current costs to determine the recommendation. VITA also begins to consider cost recovery alternatives, which can play a part in the recommendation.

Determining Total Cost

All expenses VITA incurs to provide services can generally be categorized as direct, shared or indirect. Direct expenses are those that can be identified and attributed to one specific service. For example, expenses for production printers, printer operators, printer maintenance and supplies are all in direct support of the print service. Shared expenses are those incurred by functions that generally provide support to more than one service and may be allocated proportionately or in some cases directly to appropriate services. Security and Capacity Planning are examples of shared expenses. Indirect expenses are those incurred for functions that generally support all services that VITA provides. Examples of indirect expenses include Human Resources, Payroll, Accounts Receivable and Accounts Payable. These expenses are generally allocated across all services based on an expense ratio or effort reporting.

The cost information provided in the business case is expected to address all direct expenses, in some cases shared expenses and in rare cases, indirect expenses. Financial Management Services will determine the remaining shared and indirect expenses not explicitly identified in the business case documentation. Once the remaining expenses are quantified, the total projected cost of providing the service is known. The total cost also becomes the amount VITA must recover through the charge-back process. In its simplest form in which the service is dedicated to a single customer, the total cost is charged directly to the customer receiving the service. This could be a one-time charge or a monthly recurring charge depending on the nature of the service. In many cases multiple customers will share the service, which dictates the need for development of a service rate.

Shared Services Rate Development

As mandated for an Internal Service Fund organization such as VITA, the first goal in developing a rate is to attempt to fully recover all costs associated with providing the service. While achieving full cost recovery, VITA attempts to adhere to several generally accepted best practice principles with respect to developing rates for shared services using an activity based costing methodology:

- At the top of the list is equitability. All customers must pay the same rate for the same service. Besides a good business practice, it is also considered a federally unallowable expense (OMB Circular A-87) for one customer to subsidize another by virtue of inequitable charges.

- Charges should also be consistent or repeatable. Each time a service is provided or a single unit consumed, it should result in the same charge.

- Customers should be able to understand what they are being charged for and how the charge relates to the service they are receiving.

- Customers should have the ability to control their costs to the degree that less usage results in a lower charge and greater usage results in an increased charge.

- Finally, the data capture, processing, billing, collection and accounting for the charges should be economical relative to the cost of the service. A phrase we often hear is “don’t spend dollars chasing after nickels”.

Also a critical consideration to VITA for rate development is determining the unit or metric to use as the basis for the charge. In addition to the principles cited above, it is important that the unit for charging should also be a major driver of costs incurred to provide the service. Examples include:

- One of the oldest and most familiar metrics for charging is CPU time. Appropriately, increased consumption of CPU time is generally what drives the need for additional processors or an upgrade to a higher capacity CPU. In this case, there is a strong correlation between CPU time as a charging unit and as a cost driver.

- In the example of building a shared e-mail service, the number of e-mail accounts or mailboxes may be the primary cost driver resulting in a per account rate.

- Relatively new to IT is the possibility of sharing large servers with logical or physical multi-processor capabilities leading to a facilities management rate per processor.

Ultimately, a charge-back rate is simply a way to distribute the total cost associated with providing a service to the customers that use the service. There are many different charging models and no single model is a good fit for every service. Accordingly, for each new service proposal, VITA considers employing a variety of charging models to distribute the total cost including:

- Direct charge to a single customer when the service is dedicated
- Pass through of a vendor charge to one or more customers
- Negotiated allocation to multiple customers
- Measured allocation to multiple customers
- Subscription charge per account, seat, etc
- Connect charge
- Measured usage charge

Summary

While the charging model selected and the specific rate developed will vary from service to service, VITA utilizes, as described in this document, a consistent methodology and best practice principles to guide the rate development process.

Virginia Information Technologies Agency
Rate Development Example

Purpose

The following narrative and spreadsheet reflects an example of developing a billable rate for a shared service. The project is hypothetical and the cost figures are for illustrative purposes only and are not intended to represent actual costs.

Hypothetical Project

VITA intends to develop a shared email service hosted at the RPB facility. The application will run under a Windows NT operating system. The service is initially intended to support small agencies in the Richmond metropolitan area. Over the next 3 to 4 years, some medium agencies are expected to be included in the service. The server is expected to have a 4-year life and will be depreciated accordingly. Initial expenses for software and other setup activities will also be spread over 4 years for projected recovery. Within 4 years, VITA projects a user population of 4,000. VITA was able to negotiate the most cost effective rate for licensing of the client software for a 5,000 seat license.

Estimated direct expenses for staff, hardware, software, facilities and other expenses have been provided by various functional areas within VITA. As the number of users or email accounts is the primary driver of costs, it has also been decided to use email accounts as the unit of measure for billing. Data capture of the email accounts for billing purposes will involve minimal expense as the necessary information can easily be obtained as a by-product of maintaining a table of valid accounts.

With the cost information available, the unit of measure for billing and the projected number of units available, determining the rate to charge per unit ($2.43) is accomplished with simple spreadsheet calculations as shown in the attachment.

Title: Shared Email Service					
	One Time	|----------Ongoing---------- Annual		----------|
Item	0	1	2	3	4
Cost Category					
Hardware					
1 Windows NT server	$5,000	$0	$0	$0	$0
Maintenance	$0	$1,000	$0	$0	$0
Total Hardware Required	$5,000	$1,000	$0	$0	$0
Software					
Mail server license	$7,000	$700	$0	$0	$0
Mail client license for 5,000	$160,000	$40,000	$0	$0	$0
Client Veritas (for EBARS)	$0	$0	$0	$0	$0
Total Software Required	$167,000	$40,700	$0	$0	$0
Facilities Cost (enter units* below)					
Floor Space Sq. Ft. required*	0	8	0	0	0
Floor Space (Cost Analysis will calculate)	$0	$120	$0	$0	$0
Watts for Electrical Requirements*		2850			
Watts required for A/C (cooling)*		2850			
Electrical (Cost Analysis will calculate)	$0	$3,013	$0	$0	$0
Site Preparation - Elec and cable	$1,200	$0	$0	$0	$0
Other - Lockable Cabinet	$700	$0	$0	$0	$0
Total Facility Cost	$1,900	$3,133	$0	$0	$0
Other Category					
Network or Telco - 2 router port	$0	$2,340	$0	$0	$0
Backup 50 Gb monthly (EBARS)	$0	$164	$0	$0	$0
Other - 40 cartridges vaulted monthly	$0	$456	$0	$0	$0
Hot Site backup server (Sungard)	$0	$4,080	$0	$0	$0
Total Other Cost	$0	$7,040	$0	$0	$0
Total Non-Personnel Cost	$173,900	$51,873	$0	$0	$0
Personnel Hours Required					
List Positions and No. of Hours	0	1	2	3	4
1 NT Engineer support	8	36			
2 Email security administrator	6	24			
3 Capacity Planning support	6	24			
4 Networking support	4	12			
5 Operations support	6	24			
6 Security - Firewall support	4	12			
Personnel Costs	$384	$1,728			
	$288	$1,152			
	$288	$1,152			
	$192	$576			
	$180	$720			
	$192	$576			
Total Personnel Costs	**$1,524**	**$5,904**			

	Set Up	Annual
Total Cost	$175,424	$57,777
Set up costs spread over 4 years		$43,856
VITA's Annual Direct costs		$101,633
VITA Indirect Costs (+ 15%)		$15,245
Annual amount to recover		$116,878
Projected number of accounts		4,000
VITA's monthly rate per account		$2.43